SEQUENCE LISTING

<110>   BESEME, Frederic

        BLOND, Jean-Luc

        BOUTON, Olivier

        MANDRAND, Bernard

        MALLET, Francois

        PERRON, Herve

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DISEASES OR WITH PREGNANCY DISORDERS

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<141>   1999-12-16

<150>   PCT/FR98/01442

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tactacaaac tatctcaaga actaaatggg gacatggaac gggtcgccga ctccctggtc     1860

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tgtatctttg acctccttgt taactttgtc tcttccagaa tcgaagctgt gaaactacaa     2220

atggagccca agatgcagtc caagactaag atctaccgca gaccccctgga ccggcctgct     2280

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11

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aggcaaagac aggaggtaaa gaaatagcca atcatttatt gcctgagagc acagcaggag    2640

ggacaatgat cgggatataa acccaagttt tcgagccggc aacggcaacc ccctttgggt    2700

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<213>  Human


<220>

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<223>  n = any nucleotide


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cactgggttc catggttctc ttctgtgacc cacggcttct aatataacta taacacttac     180

cacatggccc aagattccat tccttggaat ccgtgaggcc aagaactcca ggtcagagaa     240

tacgaggctt gccaccatct tggaagcggc ctgctaccat cttggaagtg gttcaccacc     300

atcttgggag ctctgtgagc aaggacccc cggtaacatt ttggcaacca cgaacggaca     360

tccaaagtga atcgaagctg taaaactaca aatggagccc aagatgcagt ccaagactaa     420

gatctaccgc agacccctgg accggcctgc tagcccacga tctgatgtta atgacatcaa     480

aggcacccct cctgaggaaa tctcagctgc acaacctcta ctacgcccca attcagcagg     540

aagcagttag agcggtcgtc ggccaacctc cccaacagca cttaggtttt cctgttgaga     600
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agctgg                                                                  666


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<213>  Human


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cccagcatct caactcacct ggactatttt accccaaggg ttcagggata gtccccatct      180

atttggccag gcattagccc aagacttgag ccaatcctca tacctggaca cttgtccttc      240

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aagcgctctt caatttcctc gctacctgtg ctacatggt ttccaaacca aaggctcaac       360

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ggcaaagggt tgacctcatt gtttacgggt agtggtggca gtagcagtct tagtatctga      840

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tctattactt gaagggccag tgctgcgact gtgcacttgt gcaactctta acccagccac     1020

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ctatgccact cgaggggacc ttttagaggt tcctttgact gatcccgacc tcaacttgta     1140

tactgatgga agttcctttg tagaaaaagg acttcgaaaa gtggggtatg cagtggtcag     1200

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                                        13
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gaaagggaaa tacaagagaa ctgccaagca tatattgaag ccaaaagagc tgcaaggcag      1560

gaccctccat tagaaatgct tattaaactt cccttagtat agggtaatcc cttccgggaa      1620

accaagcccc agtactcagc aggagaaaca gaatggggaa cctcacgagg cagttttctc      1680

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gccaaatcat tatttactgg accaggcctt ttcaaaacta tcaagcagat agtcagggcc      1860

tgtgaagtgt gccagagaaa taatcccctg ccttatcgcc aagctccttc aggagaacaa      1920

agaacaggcc attaccctgg agaagactgg caactgattt tacccacaag cccaaacctc      1980

agggatttca gtatctacta gtctgggtag atactttcac gggttgggca gaggccttcc      2040

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cccagggagt atcccaggcg ttaggtatac gatatcactt acactgcgcc tgaaggccac      2220

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14

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acttagctca cacctgacca atcagagagc tcactaaaat gctaattagg caaagacagg   3180

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aaaaaaaaaa aa                                                       3372
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gcctttttct ctcccagact aaaagcaaat aaaaacagac ttaggtaaat tctcagataa  1020

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16

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19

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20

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21

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22

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<211> 2563

<212> DNA

<213> Human

<400> 12

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gcttgccatt gttcctgcat ggctaagtgc ccaggttcat cctaattgag ctgaacacta     240

gtcactgggt tccacagttc tcttccatga accacggctt ttaatagagc tataacactc     300

atcgcaaggc ccaagattcc attccttgga atctgtgagg ccaagaaccc taggtcagag     360

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24

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caggagattt aaatcttaat taccatacaa aggtctgacc agacctagga ggaactccct    1860

tcagtacagg atgatagatg gttcctccca ggtgaatgaa aaaaaaatca caatgggtat    1920

tcagtaattg atagggagac tcttgtggaa gcagagttag aaaaactgcc taataattgg    1980

tctccccaaa cctgcgagct gtttgcactc agccaagcct taaagtactt ctagaatcaa    2040

aaagattatc tcaatcctga ctcaaaaggt tacctacacc ctctgtgaaa cgaatttact    2100

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ttccccctca aggcaaaaac acccctaaga tgtattctgg acaattggga ccaatttgac    2520

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<211> 2585

<212> DNA

<213> Human

<220>

<221> misc_feature

<222> (726)..(726)

<223> n = any nucleotide

<220>

<221> misc_feature

<222> (833)..(833)

<223> n = any nucleotide

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tttccaaacc agaggctcag ctctgcttac agcaggttaa atacttaggg ctaaaattat   240

ccaaaggcac cagggccctc agtgaggaac gtatccagcc tatactggct tatcctcatc   300

ccaaaaccct gaagcaatta agagggttcc ttggcataaa aggctgctgt tgaatatgga   360

ttcccaggta caatgaaata gccaggccat tatacacact aattacggga actcagaaag   420

ccaataccca tttagtagaa tggacacctg aagcagaagc ggctttccag gccctaaaga   480

aggccctaat ccaagcccca gtgttaagct tgccaatgga gcaagacttt tctttatatg   540

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26

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gcccatgagg taataaaggc actaattcat gaaataattc ccagatttgg atttccccaa      1980

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<211>  2575

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<213>  Human


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tccaaaccaa agacccagct ctgctcacag caggttaaat acttggggct aaaattatcc       240

aaaggcacca gggccctcag tgaggaacgt atcaagccta tactggctta tcctcatccc       300

caaatcctaa agcaactaag agagttcctt agcataacag gtttctgctg aatatggatt       360
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27

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agagtgacaa tggccctgct ttcaaggcta cagtaaccca ggagtatccc aggtgttagg   2040

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28

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cagtcatttt atctacccca accgcagtaa aagtggctgg agtggagtct tggatacatc    2520

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<210> 15

<211> 783

<212> DNA

<213> Artificial Sequence

<220>

<223> Consensus Sequence

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<221> misc_feature

<222> (406)..(406)

<223> n = any nucleotide

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<221> misc_feature

<222> (515)..(515)

<223> n = any nucleotide

<220>

<221> misc_feature

<222> (563)..(563)

<223> n = any nucleotide

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aca   783

<210> 16

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer or probe

<400> 16
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<210> 17

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer or probe

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<210> 18

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer or probe

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<210> 19

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer or probe

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<210> 20

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer or probe

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<210> 21

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer or probe

<400> 21
ttgtctcctg gattttcagg tt   22

<210> 22

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer or probe

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ggaccctacc cagtcatttt   20

<210> 23

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> PCR primer or probe

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atcaggagca cagcggacac   20

<210> 24

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Probe or primer

<400> 24
ggacatccaa agtgatacat cc   22

<210> 25

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Probe or primer

<400> 25
aatgtatggc ctgaagtgca g   21

<210> 26

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Probe or primer

<400> 26
cttcccagga tgtatcactt tg   22

<210> 27

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Probe or primer

<400> 27
cactgcagaa gaatataagt cgtt   24

<210> 28

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Probe or primer

<400> 28
gcttccaaga tggtggcaag c   21

<210> 29

<211> 678

<212> DNA

<213> Artificial Sequence

<220>

<223> Ppol-MSRV probe

<220>

<221> misc_feature

<222> (594)..(594)

<223> n = any nucleotide

<400> 29

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caggcataac aggtttctgc tgaatatgga ttcccaagta cggcaaaata gccagaccat     420

tatatacact aattaaggaa actcagaaag ccaataccca tttagtaaga tggacacctg     480

aagcagaggc agctttccag gccgtaaaga acaccctaac ccaagcccca gtgttaagct     540

tgccagcggg gcaagacttt tctttctgtg tcacagaaaa aataggaata gctntaggag     600

tccttacaca ggtccgaggg accagcttgc aacccatggc atacctgagt aaggaaattg     660

atgtagtggc aaagggtt                                                   678
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<210> 30

<211> 536

<212> DNA

<213> Artificial Sequence

<220>

<223> Pgag-LB19 probe

<400> 30

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ccaatctcca tgttgtatcc ccttccccaa ctaataagga cccccctttc aacccaaaca      60

gtccaaaagg acatagacaa aggagtaaac aatgaaccaa agagtgccaa tattccctgg     120

ttatgcaccc tccaagcggt gggagaagaa ttcggcccag ccagagtgca tgtacctttt     180

tctctctcac acttgaagca aattaaaata gacctaggta aattctcaga tagccctgat     240

ggctatattg atgtttttaca aggattagga caatcctttg atctgacatg gagagatata    300

atattactgc taaatcagac gctaacctca aatgagagaa gtgctgccat aactggagcc     360

cgagagtttg gcaatctctg gtatctcagt caggtcaatg ataggatgac aacggaggaa     420

agagaacgat tccccacagg gcagcaggca gttcccagtg tagctcctca ttgggacaca     480
```

```
gaatcagaac atggagattg gtgccgcaga catttaaagc tttccccggg taccga          536
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<210> 31

<211> 591

<212> DNA

<213> Artificial Sequence

<220>

<223> Penv-C15 probe

<400> 31
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ccatggccat ctacactgaa caagatttat acaatcatgt cgtacctaag ccccacaaca       60

aaagagtacc cattcttcct tttgttatca gagcaggagt gctaggcaga ctaggtactg      120

gcattggcag tatcacaacc tctactcagt tctactacaa actatctcaa gaaataaatg      180

gtgacatgga acaggtcact gactccctgg tcaccttgca agatcaactt aactccctag      240

cagcagtagt ccttcaaaat cgaagagctt tagacttgct aaccgccaaa agagggggaa      300

cctgtttatt tttaggagaa gaacgctgtt attatgttaa tcaatccaga attgtcactg      360

agaaagttaa agaaattcga gatcgaatac aatgtagagc agaggagctt caaaacaccg      420

aacgctgggg cctcctcagc caatggatgc cctgggttct ccccttctta ggacctctag      480

cagctctaat attgttactc ctctttggac cctgtatctt aacctcctt gttaagtttg       540

tctcttccag aattgaagct gtaaagctac agatggtctt acaaatctag a               591
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<210> 32

<211> 364

<212> DNA

<213> Artificial Sequence

<220>

<223> Ppro-E probe

<400> 32
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ctaacctgag gatccagcag caggactgag ggtgcccggg gcaagtgcca gcccatgcca       60

tcaccctcag agccccgggt atgtttgacc attgagagcc aggaagttaa ctgtctcctg      120
```

```
gacactggcg cagccttctc agtcttactt tcctgtccca gacaattgtc ctccagatct    180

gtcactatcc gaggggtcct aggacagcca gtcactacat acttctctca gccactaagt    240

tgtgactggg gaactttact cttttcacat gcttttctaa ttatgcctga aagccccact    300

cccttgttag ggagagacat tttagcaaaa gcaggggcca ttatacacct gaacaagctt    360

gaaa                                                                 364
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<210> 33

<211> 538

<212> PRT

<213> Human

<400> 33

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Met Gly Leu Pro Tyr His Ile Phe Leu Cys Ser Val Leu Ser Pro Cys
1               5                   10                  15


Phe Thr Leu Thr Ala Pro Pro Pro Cys Arg Cys Met Thr Ser Ser Ser
            20                  25                  30


Pro His Pro Glu Phe Leu Trp Arg Met Gln Arg Pro Gly Asn Ile Asp
        35                  40                  45


Ala Pro Ser Tyr Arg Ser Leu Ser Lys Gly Thr Pro Thr Phe Thr Ala
    50                  55               60


His Thr His Met Pro Arg Asn Cys Tyr His Ser Ala Thr Leu Cys Met
65                  70                  75                  80


His Ala Asn Thr His Tyr Trp Thr Gly Lys Met Ile Asn Pro Ser Cys
                85                  90                  95


Pro Gly Gly Leu Gly Val Thr Val Cys Trp Thr Tyr Phe Thr Gln Thr
            100                 105                 110


Gly Met Ser Asp Gly Gly Gly Val Gln Asp Gln Ala Arg Glu Lys His
        115                 120                 125


Val Lys Glu Val Ile Ser Gln Leu Thr Gly Val His Gly Thr Ser Ser
    130                 135                 140
```

```
Pro Tyr Lys Gly Leu Asp Leu Ser Lys Leu His Glu Thr Leu Arg Thr
145             150             155             160

His Thr Arg Leu Val Ser Leu Phe Asn Thr Thr Leu Thr Gly Leu His
            165             170             175

Glu Val Ser Ala Gln Asn Pro Thr Asn Cys Trp Ile Cys Leu Pro Leu
            180             185             190

Asn Phe Arg Pro Tyr Val Ser Ile Pro Val Pro Glu Gln Trp Asn Asn
            195             200             205

Phe Ser Thr Glu Ile Asn Thr Thr Ser Val Leu Val Gly Pro Leu Val
    210             215             220

Ser Asn Val Glu Ile Thr His Thr Ser Asn Leu Thr Cys Val Lys Phe
225             230             235             240

Ser Asn Thr Thr Tyr Thr Thr Asn Ser Gln Cys Ile Arg Trp Val Thr
            245             250             255

Pro Pro Thr Gln Ile Val Cys Leu Pro Ser Gly Ile Phe Phe Val Cys
            260             265             270

Gly Thr Ser Ala Tyr Arg Cys Leu Asn Gly Ser Ser Glu Ser Met Cys
            275             280             285

Phe Leu Ser Phe Leu Val Pro Pro Met Thr Ile Tyr Thr Glu Gln Asp
    290             295             300

Leu Tyr Ser Tyr Val Ile Ser Lys Pro Arg Asn Lys Arg Val Pro Ile
305             310             315             320

Leu Pro Phe Val Ile Gly Ala Gly Val Leu Gly Ala Leu Gly Thr Gly
            325             330             335

Ile Gly Gly Ile Thr Thr Ser Thr Gln Phe Tyr Tyr Lys Leu Ser Gln
            340             345             350

Glu Leu Asn Gly Asp Met Glu Arg Val Ala Asp Ser Leu Val Thr Leu
            355             360             365
```

38

```
Gln Asp Gln Leu Asn Ser Leu Ala Ala Val Val Leu Arg Asn Arg Arg
    370             375             380

Ala Leu Asp Leu Leu Thr Ala Glu Arg Gly Gly Thr Cys Leu Phe Leu
385             390             395             400

Gly Glu Glu Cys Cys Tyr Tyr Val Asn Gln Ser Gly Ile Val Thr Glu
            405             410             415

Lys Val Glu Glu Ile Pro Asp Arg Ile Gln Arg Ile Ala Glu Glu Leu
            420             425             430

Arg Asn Thr Gly Pro Trp Gly Leu Leu Ser Arg Trp Met Pro Trp Ile
        435             440             445

Leu Pro Phe Leu Gly Pro Leu Ala Ala Ile Ile Leu Leu Leu Leu Phe
    450             455             460

Gly Pro Cys Ile Phe Asp Leu Leu Val Asn Phe Val Ser Ser Arg Ile
465             470             475             480

Glu Ala Val Lys Leu Gln Met Glu Pro Lys Met Gln Ser Lys Thr Lys
            485             490             495

Ile Tyr Arg Arg Pro Leu Asp Arg Pro Ala Ser Pro Arg Ser Asp Val
        500             505             510

Asn Asp Ile Lys Gly Thr Pro Pro Glu Glu Ile Ser Ala Ala Gln Pro
        515             520             525

Leu Leu Arg Pro Asn Ser Ala Gly Ser Ser
    530             535
```

<210> 34

<211> 52

<212> PRT

<213> Human

<400> 34

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Met Glu Pro Lys Met Gln Ser Lys Thr Lys Ile Tyr Arg Arg Pro Leu
1               5               10              15
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Asp Arg Pro Ala Ser Pro Arg Ser Asp Val Asn Asp Ile Lys Gly Thr
            20   25   30

Pro Pro Glu Glu Ile Ser Ala Ala Gln Pro Leu Leu Arg Pro Asn Ser
        35   40   45

Ala Gly Ser Ser
    50

<210>   35

<211>   48

<212>   PRT

<213>   Human

<400>   35

Met Leu Met Thr Ser Lys Ala Pro Leu Leu Arg Lys Ser Gln Leu His
1   5   10   15

Asn Leu Tyr Tyr Ala Pro Ile Gln Gln Glu Ala Val Arg Ala Val Val
            20   25   30

Gly Gln Pro Pro Gln Gln His Leu Gly Phe Pro Val Glu Met Gly Asp
        35   40   45

<210>   36

<211>   20

<212>   DNA

<213>   Human

<400>   36
atccaaagtg gtgagtaata   20

<210>   37

<211>   20

<212>   DNA

40

<213>   Human

<400>   37
cttttttcag atgggaaacg   20

<210>   38

<211>   10

<212>   DNA

<213>   Human

<400>   38
atccmaagtg   10

<210>   39

<211>   20

<212>   DNA

<213>   Human

<400>   39
caggaggaaa gtaactaaaa   20

<210>   40

<211>   10

<212>   DNA

<213>   Human

<400>   40
atgggaaacg   10

<210>   41

<211>   20

<212>   DNA

<213>   Human

<400> 41
ccatccctag atacatcctg   20

<210> 42

<211> 20

<212> DNA

<213> Human

<400> 42
tctcttccag aatcgaagct   20

<210> 43

<211> 873

<212> DNA

<213> Human

<400> 43
ccctggggcg ggcttccttt ctgggatgag ggcaaaacgc ctggagatac agcaattatc   60

ttgcaactga gagacaggac tagctggatt tcctaggccg actaagaatc cctaagccta   120

gctgggaagg tgaccacgtc cacctttaaa cacggggctt gcaacttagc tcacacctga   180

ccaatcagag agctcactaa aatgctaatt aggcaaagac aggaggtaaa gaaatagcca   240

atcatctatt gcctgagagc acagcaggag ggacaacaat cgggatataa acccaggcat   300

tcgagctggc aacagcagcc cccctttggg tcccttccct ttgtatggga gctgttttca   360

tgctatttca ctctattaaa tcttgcaact gcactcttct ggtccatgtt tcttacggct   420

cgagctgagc ttttgctcac cgtccaccac tgctgtttgc caccaccgca gacctgccgc   480

tgactcccat ccctctggat cctgcagggt gtccgctgtg ctcctgatcc agcgaggcgc   540

ccattgccgc tcccaattgg gctaaaggct tgccattgtt cctgcacggc taagtgcctg   600

ggtttgttct aattgagctg aacactagtc actgggttcc atggttctct tctgtgaccc   660

acggcttcta atagaactat aacacttacc acatggccca agattccatt ccttggaatc   720

cgtgaggcca agaactccag gtcagagaat acgaggcttg ccaccatctt ggaagcggcc   780

tgctaccatc ttggaagtgg ttcaccacca tcttgggagc tctgtgagca aggacccccc   840

42

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ggtaacattt tggcaaccac gaacggacat cca                            873


<210>  44

<211>  815

<212>  DNA

<213>  Human



<400>  44
tcgtcggcca acctccccaa cagcacttag gttttcctgt tgagatgggg gactgagaga    60

caggactagc tggatttcct aggctgacta agaatcccta agcctagctg ggaaggtgac   120

cacatccacc tttaaacacg gggcttgcaa cttagctcac acctgaccaa tcagagagct   180

cactaaaatg ctaattaggc aaagacagga ggtaaagaaa tagccaatca tctattgcct   240

gagagcacag caggagggac aatgatcggg atataaaccc aagtcttcga gccggcaacg   300

gcaaccccct ttgggtcccc tccctttgta tgggagctct gttttcatgc tatttcactc   360

tattaaatct tgcaactgca ctcttctggt ccatgtttct tacggcttga gctgagcttt   420

cgctcgccat ccaccactgc tgtttgccgc caccgcagac ccgccgctga ctcccatccc   480

tctggatcat gcagggtgtc cgctgtgctc ctgatccagc gaggcaccca ttgccgctcc   540

caatcgggct aaaggcttgc cattgttcct gcatggctaa gtgcctgggt tcatcctaat   600

tgagctgaac actagtcact gggttccatg gttctcttct gtgacccaca gcttctaata   660

gagctataac actcaccgca tggcccaagg ttccattcct tgaatccata aggccaagaa   720

ccccaggtca gagaacacga ggcttgccac catcttggga gctctgtgag caaggacccc   780

caagtaacac aaccatgagg gtgcaaatgc atggg                              815


<210>  45

<211>  425

<212>  DNA

<213>  Human



<400>  45
caattcagca ggaagcagtt agagcggtgg tcggccaacc tccccaacag cacttaggtt    60

ttcctgttga gatgggggac tgagagacag gactagctgg atttcctagg ctgactaaga   120
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43

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atccttaagc ctaggtggga aggtgaccac atccacctt aaacacgggg cttgcaactt       180

agctcacacc tgaccaatca gagagctcac taaaatgcta attaggcaaa gacaggaggt       240

aaagaaatag ccaatcattt attgcctgag agcacagcag gagggacaat gatcgggata       300

taaacccaag ttttcgagcc ggcaacggca accccctttg ggtcccctcc ctttgtatgg       360

gagctctgtt ttcatgctat ttcactctat taaatcttgc aactgcaaaa aaaaaaaaaa       420

aaaaa                                                                   425


<210>    46

<211>    427

<212>    DNA

<213>    Human


<400>    46
caattcagca ggaagcagtt agagcggtcg tcggccaacc tccccaacag cacttaggtt        60

ttcctgttga gatgggggac tgagagacag gactagctgg atttcctagg ctgactaaga       120

atccctaagc ctagctggga aggtgaccac atccacctt aaacacgggg cttgcaactt       180

agttcacacc tgaccaatca gagagctcac taaaatgcta attaggcaaa gacaggaggt       240

aaagaaatag ccaatcatct attgcatgag agcacagcag gagggacaat gatcgggata       300

taaacccaag tcttcgagcc ggcaacggca accccctttg ggtcccctcc ctttgtatgg       360

gagctctgtt ttcatgctat ttcactctat taaatcttgc agctgcgaaa aaaaaaaaaa       420

aaaaaaa                                                                 427


<210>    47

<211>    600

<212>    DNA

<213>    Human


<400>    47
caacaatcgg gatataaacc caggcattcg agctggcaac agcagccccc ctttgggtcc        60

cttcccttg tatgggagct gttttcatgc tatttcactc tattaaatct tgcaactgca       120

ctcttctggt ccatgtttct tacggctcga gctgagcttt tgctcaccgt ccaccactgc       180
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tgtttgccac caccgcagac ctgccgctga ctcccatccc tctggatcct gcagggtgtc    240
cgctgtgctc ctgatccagc gaagcgccca ttgccgctcc caattgggct aaaggcttgc    300
cattgttcct gcacggctaa gtgcctgggt ttgttctaat tgagctgaac actagtcact    360
gggttccatg gttctcttct gtgacccacg gcttctaata gaactataac acttaccaca    420
tggcccaaga ttccattcct tggaatccgt gaggccaaga actccaggtc agagaatacg    480
aagcttgcca ccatcttgga agcggcctgc taccatcttg gaagtggttc accaccatct    540
tgggagctct gtgagcaagg acccccggt aacattttgg caaccacgaa cggacatcca    600
```

<210>   48

<211>   530

<212>   DNA

<213>   Human

<400>   48
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atgggagctg ttttcatgct atttcactct attaaatctt gcaactgcac tcttctggtc     60
catgtttctt acggctcgag ctgagctttt gctcaccgtc caccactgct gtttgccacc    120
accgcagacc tgccgctgac tcccatccct ctggatcctg cagggtgtcc gctgtgctcc    180
tgatccagcg aagcgcccat tgccgctccc aattgggcta aaggcttgcc attgttcctg    240
cacggctaag tgcctgggtt tgttctaatt gagctgaaca ctagtcactg gttccatgg    300
ttctcttctg tgacccacgg cttctaatag aactataaca cttaccacat ggcccaagat    360
tccattcctt ggaatccgtg aggccaacga actccaggtc agagaatacg aagcttgcca    420
ccatcttgga agcggcctgc taccatcttg gaagtggttc accaccatct tgggagctct    480
gtgagcaagg acccccggt gacattttgg cgaccaccaa cggacatccc    530
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<210>   49

<211>   486

<212>   DNA

<213>   Human

<220>

45
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<221> misc_feature

<222> (84)..(84)

<223> n = any nucleotide


<220>

<221> misc_feature

<222> (193)..(193)

<223> n = any nucleotide


<220>

<221> misc_feature

<222> (241)..(241)

<223> n = any nucleotide


<400> 49
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cactgctgtt tgccaccacc gcanacctgc cgctgactcc catccctctg gatcctgcag   120

ggtgtccgct gtgctcctga tccagcgagg cgcccattgc cgctcccaat tgggctaaag   180

gcttgccatt gtncctgcac ggctaagtgc ctgggtttgt tctaattgag ctgaacacta   240

ntcactgggt tccatggttc tcttctgtga cccacggctt ctaatagaac tataacactt   300

accacatggc ccaagattcc attccttgga atccgtgagg gcaagaactc caggtcagag   360

aatacgaggc ttgccaccat cttggaagcg gcctgctacc atcttggaag tggttcacca   420

ccatcttggg agctctgtga gcaaggaccc cccggtaaca ttttggcaac cacgaacgga   480

catcca   486
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<210> 50

<211> 37

<212> PRT

<213> Human

<400> 50

Lys Ile Tyr Arg Arg Pro Leu Asp Arg Pro Ala Ser Pro Arg Ser Asp
1               5                   10                  15

Val Asn Asp Ile Lys Gly Thr Pro Pro Glu Glu Ile Ser Ala Ala Gln
            20                  25                  30

Pro Leu Leu Arg Pro
        35

<210> 51

<211> 35

<212> PRT

<213> Human

<400> 51

Met Thr Ser Lys Ala Pro Leu Leu Arg Lys Ser Gln Leu His Asn Leu
1               5                   10                  15

Tyr Tyr Ala Pro Ile Gln Gln Glu Ala Val Arg Ala Val Val Gly Gln
            20                  25                  30

Pro Pro Gln
        35

<210> 52

<211> 33

<212> PRT

<213> Rex PTLV-L

<400> 52

Arg Leu Tyr Asn Thr Leu Ser Leu Asp Ser Pro Pro Ser Pro Pro Lys
1               5                   10                  15

Glu Leu Pro Ala Pro Ser Arg Phe Ser Pro Pro Gln Pro Leu Leu Arg
            20                  25                  30

Pro


<210> 53

<211> 35

<212> PRT

<213> Tat SIV-AGM


<400> 53

Val Thr Tyr His Ala Pro Arg Thr Arg Arg Lys Lys Ile Arg Ser Leu
1               5                   10                  15


Asn Leu Ala Pro Leu Gln His Gln Ser Ile Ser Thr Lys Trp Gly Arg
            20                  25                  30


Asp Gly Gln
            35